



Annual Report (2019-20)

Team MOONRIDERS is the SAE Collegiate Club of JECRC Jaipur. The club participates in various National Motorsports events in which a racing vehicle is designed and fabricated under the Moonriders Lab, which competes with teams coming from different parts of India.

In Session 2018-19 Team Moonriders participated in the following events:-

1. Baja 2020
2. MegaATV Championship

BAJA 2020

The BAJA SAE Series® is an event for the undergraduate engineering students, organized globally by the Society of Automotive Engineers, USA. The event originated in the name of Mini - BAJA, in the year 1976 at University of Carolina. Since then, the event has spanned across six countries – USA, Mexico, South Africa, Korea, Brazil and India. The BAJA

SAE tasks the students to design, fabricate and validate a single seater four - wheeled off road vehicle to take part in series of events spread over a course of 5 days that test the vehicle for the sound engineering practices that have gone into it, the agility of the vehicle in terms of gradability, speed, acceleration and maneuverability characteristics and finally its ability to endure that back breaking durability test.

Virtual Round

In *July 2019*, the team participated in the *Virtual Round* of BAJA SAEINDIA 2020 at Chitkara University, *Chandigarh*. The virtual round tests the knowledge and capability of a team based on their *Design Presentation* evaluated by the Judges from various industries. There were a total of 25 members in the team for this particular event. Team members were assigned different departments named Design, Suspension, Steering, Brakes, Powertrain and Marketing. The results of the Virtual Round were announced in late of August 2019 in which the *team qualified for the BAJA SAEINDIA Main Event* to be held in January 2020 at *Pithampur*, Indore. Based on the score, the team was at 14th position amongst a total of around 360 teams.

Dynamic Round

This year Dynamic round was not good for Team Moonriders due to a technical issue in the brake pedal which resulted in the wheel spin during brake test and were disqualified form BAJA 2020.



Photo taken Outside Indore Railway Station



Event Site



Photo taken on the last day of event









List of Participants

Year	S.No	Name
4 th	1	Sumit Jain
	2	Rohit Chahar
	3	Pankaj Jangid
	4	Punit Choudhary
	5	Sourav Choudhary
	6	Ekant Labhana
	7	Aditi Gupta
	8	Suryansh Maheswari
	9	Kishan Kumawat
	10	Vikram Pratap Singh
3 rd	11	Ravi Sharma
	12	Chirag Panchal
	13	Garvit Tyagi
	14	Ishan Panchal
	15	Yash Bakliwal
	16	Sohel Mansoori
	17	Animesh Kumar
	18	Vedant Saxena
	19	Anish Sharma
	20	Bhanu Dixit
	21	Yugant Garg
2 nd	22	Rizwan Ahemad
	23	Manish Choudhary
	24	Piyush Agrawal
	25	Rajnish Verma

Achievements in BAJA 2020

Achieved All India Rank 14 and Rajasthan Rank 1 in Virtual round which was a great achievement for us.

This became possible by the Hard Work of seniors in the Designing and Calculations of ATV.

[For more photos of the event, click the link below](#)

[BAJA 2020](#)

MegaATV Championship

Mega ATV Championship is a national level ATV (All terrain vehicles) racing championship in India organized by “Autosports India”. It is inter college national level racing championship for engineering students basically for mechanical/ automobile branches. This championship is well known for its extraordinary racing format, night endurance racing. Till date 4 seasons held and the third season to be held in March 2020. The championship started its first season in 2015 held in Bhubaneswar.

We were going to participate in this event to indulge some new students mainly from First and Second year in Team Moonriders, and were focusing on giving more Practical knowledge to them. We were going to compete with the same ATV in the event which we used in BAJA 2020 in January 2020.

Event was going to be held on the last week of *March 2020* in *Goa*. ATV was ready and was undergoing testing phase but unfortunately due to Covid-19, event was postponed a week before and till now there is no further update for the next date of the event.

List of Participants

Year	S.No	Name
1 st	1	Shivanshu Puri Goswami
	2	Surendra Singh Rathore
	3	Utkarsh Natu
	4	KK Sidhartha
	5	Yukti Choudhary
	6	Shubham Tiwari
	7	Snehil Kumar
	8	Keshav Parikh
2 nd	9	Vipul Tak
	10	Lakshendra Suman
	11	Mohit Choudhary
	12	Prince Soni
	13	Manish Suthar
	14	Shailesh Kalwar
	15	Nikhil Kumar Sahu
	16	Rudrakshi Kodap
	17	Shyam Sundar
	18	Yashvant Sharma
	19	Govind
	20	Mahendra Solanki
	21	Prajwal Shrotriya
	22	Pragyan Vashistha
	23	Shubham Jindal
	24	Nimish Bhatnagar
	25	Divya Bharti
3 rd	26	Vaibhav Jain
	27	Lalit Goyal
	28	Hitik Khandelwal
	29	Vivek Pitroni
4 th	30	Pratham Tailor
	31	Deepak Dugar

Annual Report (2018-19)

Team MOONRIDERS is the SAE Collegiate Club of JECRC Jaipur. The club participates in various National Motorsports events in which a racing vehicle is designed and fabricated under the Moonriders Lab, which competes with teams coming from different parts of India.

In Session 2018-19 Team Moonriders participated in the following events:-

3. Jaipur Street Karting Cup (JSKC)
4. Baja 2019
5. National Electric Kart Championship – Season 2 (NEKC-2)

Jaipur Street Karting Cup

About the Event

It is a variant of open-wheel motorsports with small open Four Wheel Vehicle called karts, Go-Karts or gearbox/shifter karts depending on the design. They are usually raced on skilled down circuit. Driving the street by Go-Kart is one most thrilling way to experience the racing.

Virtual Round

Held on 15th March, 2018

Venue: Arya Group of Colleges (Main Campus), Jaipur

Secured 6th Rank in the Virtuals among 14 teams registered.



Dynamic Round

Technical Inspection: 15th and 16th March, 2018

Dynamic Events: 16th March, 2018

Drag Race: 17th March, 2018

14 Teams showed their presence in the event.

Our team qualified the Technical Inspection in first attempt on the very First day.

Our team secured 7th Position among the 14 Teams Registered.

List of Participants

S.No	Name of Participant	Year
1	Sumit Jain	2 nd
2	Punit Choudhary	2 nd
3	Sourav Choudhary	2 nd
4	Navneet Jhasal	2 nd
5	Saksham Soni	2 nd
6	Sarang choudhary	2 nd
7	Abhishek Gupta	2 nd
8	Krishna Agarwal	2 nd
9	Kishan Kumawat	2 nd
10	Pankaj Jangir	2 nd
11	Bharat Singhal	2 nd
12	Vikram Pratap Singh	2 nd
13	Praveen Mangawa	2 nd
14	Dattatrey Singh	2 nd
15	Yogesh Kumar Dwivedi	2 nd
16	Usaka Sherwani	2 nd
17	Jayant Soti	2 nd
18	Deepak Kurup	2 nd
19	Dattatreya Gorsia	2 nd
20	Naveen Kumawat	2 nd
21	Divyansh Shrangir	2 nd
22	Pratyush Bharadwaj	2 nd
23	Arpit Sharma	2 nd
24	Rohit Chahar	2 nd

BAJA

About the Event

The BAJA SAE Series is an event for the undergraduate engineering students, organized globally by the Society of Automotive Engineers, USA. The event originated in the name of Mini - BAJA, in the year 1976 at University of Carolina. Since then, the event has spanned across six countries – USA, Mexico, South Africa, Korea, Brazil and India. The BAJA SAE tasks the students to design, fabricate and validate a single seater four - wheeled off road vehicle to take part in series of events spread over a course of 5 days that test the vehicle for the sound engineering practices that have gone into it, the agility of the vehicle in terms of gradability, speed, acceleration and maneuverability characteristics and finally its ability to endure that back breaking durability test.

Virtual Round

In *July 2018*, the team participated in the *Virtual Round* of BAJA SAEINDIA 2019 at *Chandigarh*. The virtual round tests the knowledge

and capability of a team based on their *Design Presentation* evaluated by the Judges from various industries. There were a total of 21 members in the team for this particular event. Team members were assigned different departments named Design, Suspension, Steering, Brakes, Powertrain and Marketing. The results of the Virtual Round were announced in late of August 2018 in which the *team qualified for the BAJA SAEINDIA Main Event* to be held in January 2019 at Pithampur, Indore. Based on the score, the team was at 107th position amongst a total of 363 teams.

After successful test runs of the vehicle, it was dispatched to Event site i.e. Pithampur, Indore at 20 Jan 2019.

Dynamic Round

Our ATV was successfully delivered at event site. Now the time came to test the vehicle which we manufactured according to the Promise we made in Virtual Round.

A comprehensive schedule of the event is shown in the below picture.

Day -2 - 22nd Jan 2019				mBaja & eBAJA Onsite Registration			
Start Time	End Time	Venue	Events / Activities	Start Time	End Time	Venue	Events / Activities
08:00	19:00	BAJA SAEINDIA Site	On-site Registration for Teams				
Day -1 - 23rd Jan 2019				Baja Aptitude Test (BAT), Press Conference & Judges Meet, mBaja & eBAJA Onsite Registration			
08:00	10:30	BAJA SAEINDIA Site	Onsite Registration for Teams				
08:00	21:00	LNCT Indore	HR BAJA Aptitude Test				
09:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Technical Evaluation				
18:30	19:00	Hotel Radisson Blu	Judges Registration				
19:00	21:00	Hotel Radisson Blu	Judges Meet followed by Dinner				
Day 0 - 24th Jan 2019				Inauguration, mBaja & eBAJA Onsite Registration, Technical evaluation, Static Evaluations - Dronacharya Award, Sales Award, Cost Award			
06:00	07:30		Transport from Indore to BAJA site				
08:00	10:00	BAJA SAEINDIA Site	On-site Registration for Teams				
09:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Technical Evaluation				
11:30	18:30	BAJA SAEINDIA Site	Dronacharya Award evaluation				
11:30	11:45	BAJA SAEINDIA Site	BAJA Oath				
11:45	12:30	BAJA SAEINDIA Site	Inauguration, AutoCAR Launch				
12:30	14:30	BAJA SAEINDIA Site	Lunch				
13:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Cost evaluation				
13:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Sales evaluation				
14:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Dynamic Events				
14:00	18:00	BAJA SAEINDIA Site	Go Green Award evaluation				
18:00	18:30	BAJA SAEINDIA Site	BAJA Site closure				
18:30	20:00	BAJA SAEINDIA Site	Transport from BAJA Site to Indore				
Day 1 - 25th Jan 2019				mBaja & eBAJA Technical evaluation, Design evaluation, Dynamic Events, Static Evaluations - Go Green Award, Innovation Award & CAE Award & Entertainment Night			
07:00	08:30		Transport from Indore to BAJA site				
09:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Design evaluation				
09:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Technical Evaluation				
12:30	14:30	BAJA SAEINDIA Site	Lunch				
09:00	18:00	BAJA SAEINDIA Site	mBAJA & eBAJA Dynamic Events				
14:00	18:00	BAJA SAEINDIA Site	Innovation Award evaluation				
14:00	18:00	BAJA SAEINDIA Site	CAE Award evaluation				
18:00	18:30	BAJA SAEINDIA Site	BAJA Site closure				
18:00	20:00	BAJA SAEINDIA Site	Entertainment Night				
20:00	21:00	BAJA SAEINDIA Site	High Tea				
21:30	23:00	BAJA SAEINDIA Site	Transport from BAJA Site to Indore				
Day 2 - 26th Jan 2019				mBaja Technical evaluation, Dynamic Events, & Drivers briefing and eBAJA Endurance Run			
07:00	08:30		Transport from Indore to BAJA site				
09:00	18:00	BAJA SAEINDIA Site	mBAJA Dynamic Events				
09:00	18:00	BAJA SAEINDIA Site	mBAJA Technical Evaluation				
13:00	14:00	BAJA SAEINDIA Site	mBAJA Briefing to the Team Captains/Drivers				
12:30	13:00	BAJA SAEINDIA Site	eBAJA briefing to the Team Captains/Drivers				
12:30	14:30	BAJA SAEINDIA Site	Lunch				
15:00	17:00	BAJA SAEINDIA Site	mBAJA Practice Run on Track (2 Runs)				
15:00	17:00	BAJA SAEINDIA Site	eBAJA Endurance race flag off				
17:00	17:30	BAJA SAEINDIA Site	Souvenir of eBAJA Cars				
18:00	18:30	BAJA SAEINDIA Site	BAJA Site closure				
18:30	20:00	BAJA SAEINDIA Site	Transport from BAJA Site to Indore				
Day 3 - 27th Jan 2019				mBaja Endurance Run, mBAJA & eBAJA Velocity function			
06:30	07:00		Transport from Indore to BAJA site				
09:30	13:30	BAJA SAEINDIA Site	Endurance Event				
12:30	14:30	BAJA SAEINDIA Site	Lunch				
13:30	14:30	BAJA SAEINDIA Site	Scholarship of top 10 Cars				
10:00	14:00	BAJA SAEINDIA Site	Failure Analysis Study - Lead Judges				
15:00	18:00	BAJA SAEINDIA Site	Velocity function				
18:00	18:30	BAJA SAEINDIA Site	BAJA Site closure				
18:30	20:00	BAJA SAEINDIA Site	Transport from BAJA Site to Indore				
Day 4 - 28th Jan 2019				HR Meet			
08:00	09:30		Transportation from Indore to LNCT College				
10:30	10:35	LNCT, Indore	HR Meet Inauguration				
10:45	13:30	LNCT, Indore	Pre Placement talk for 3rd & 4th year Students				
13:30	14:00	LNCT, Indore	Lunch				
14:30	19:00	LNCT, Indore	Group Discussion by different companies				
19:00	19:15	LNCT, Indore	Results				
19:15	20:00	LNCT, Indore	Transportation from LNCT to Indore				
Day 5 - 29th Jan 2019				HR Meet			
08:00	09:30		Transportation from Indore to LNCT College				
10:30	16:00	LNCT, Indore	Personal Interviews				
13:00	14:00	LNCT, Indore	Lunch				
16:00	16:30	LNCT, Indore	Results				
17:30	19:00	LNCT, Indore	Transportation from LNCT to Indore				

The team reached Indore on 22 Jan 2019 consisting of 17 members only. The event site was at a distance of 60 kms from the place of our stay. BAJA SAE provides free bus transportation and lunch to all the teams.



Team during the departure from Durgapura Railway Station on 22 Jan



Event Venue

List of Participants

Department	S.No	Member	Year
Design	1	Mohsin Khan	4 th
	2	Sumit Jain	3 rd
Power Train	3	Chandraprakash	4 th
	4	Suraj Prajapati	4 th
	5	Suryansh Maheshwari	3 rd
	6	Kishan Kumawat	3 rd
	7	Bhanu Dixit	2 nd
Suspension	8	Manish Jain	4 th
	9	Himanshu Jangid	4 th
	10	Vishal Mittal	3 rd
	11	Rahul Singh	2 nd
Steering	12	Mohd. Aman Luhar	4 th
	13	Kaushal Lodhi	4 th
	14	Alok Patel	4 th
	15	Ekant	3 rd
Brakes	16	Abhishek Kumar	4 th
	17	Piyush Pursnani	4 th
	18	Parul Yadav	4 th
	19	Anish	2 nd
Marketing	20	Pankaj Dayma	4 th
	21	Mohit Nagpal	4 th

Results

We ended up with a score of 357.8/1000 which makes us to be at the 52nd position. Though we didn't have a phenomenal result at the end, we deeply believe that we could have done much better as there wasn't any problem in the design and manufacturing as done by the team. The only problem we had was from the supplier's side from

whom we purchased certain components which weren't able to sustain in any conditions.

The biggest achievement for us in this event is that we have learned a lot of things related to design, development and execution of ideas and plans. The event taught us to be more disciplined and have a result oriented mindset. We all had a great experience participating in such an event where we were able to work under high stress situations, taught us to be more of a team player and last but not the least, made us better engineers.



For more Pictures click on the given link

National Electric Kart Championship (Season-2)

About the Event

National Electric Kart Championship (NEKC) is a peculiar concept in the era of Go karting. In recent years Go-karting has embossed its way in the field of racing competition. As Go- karts has been running on engines from past years, but NEKC has lured it by introducing the concept of using Electric motor as a driving source of energy. It is proving out to be an ecofriendly concept, which is much needed for our future generations. The objective of NEKC is to provide a gateway to the future engineers to design, fabricate and conceive an Electric Go – kart.

VIRTUAL ROUND

This is a qualifying round for the event, the registered teams present a detailed presentation of the vehicle which includes proposed design of Vehicle along with another important parameters. The teams qualifying the virtual round gets allowed to participate in Dynamic Round. This virtual round took place Online & Offline in Month of October 2019

DYNAMIC ROUND

This round spread over a span of 4 days & took place at Bhopal where all the teams competed against each other with their Self fabricated vehicles. The Vehicles were tested on various parameters and with different events like Autocross test, Maneuverability test, Drag race, Endurance Race, Innovation round etc. The teams were judged on presentation skills in Business Plan & Cost Report. The Dynamic round of the event took place in last week of March 2020.

List of Participants

Department	S.No	Member Name	Year
Design	1	Rahul Singh	2 nd
	2	Shoel Mansoori	2 nd
	3	Dhananjay Yadav	2 nd
	4	Aditya Raj	2 nd
	5	Rajnish Verma	1 st
	6	Prince Soni	1 st
Power Train	7	Harshwardhan Choudhary	2 nd
	8	Ankur Agarwal	2 nd
	9	Animesh Kumar	2 nd
	10	Bhuvnesh Mandal	2 nd
	11	Vipul Tak	1 st
	12	Manish Choudhary	1 st
Steering	13	Bhanu Dixit	2 nd
	14	Yugant Garg	2 nd
	15	Chirag Panchal	2 nd
	16	Harshit Rathore	2 nd
	17	Prateek Agarwal	2 nd
	18	Shivansh Singh	1 st
	19	Tanay Vijay	1 st
Brakes	20	Anish Sharma	2 nd
	21	Ishaan Panchal	2 nd
	22	Rahul Mahavar	2 nd
	23	Karan Pandey	2 nd
	24	Priyansh Gupta	1 st
	25	Mohit Choudhary	1 st
Marketing	26	Ravi Sharma	2 nd
	27	Yash Bakliwal	2 nd
	28	Ayush Sharma	2 nd
	29	Vedant Saxena	2 nd
	30	Kunal Jain	2 nd
	31	Mohit Soni	2 nd
	32	Yashvant Sharma	1 st

Awards

1. Autocross Winner (Trophy + Cash Prize)
2. Lightest E-Kart (Trophy + Cash Prize)
3. Overall Third
4. Third in Endurance Race



Victory Time



We Are Team, We Are Winner

Members enjoying after receiving Awards



Photo taken during Endurance

For More photos of the event click on the given link

[NEKC 2](#)